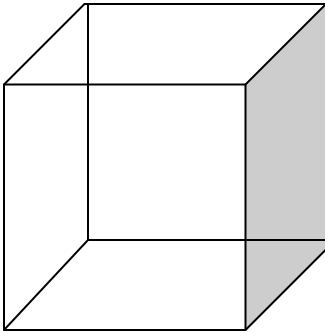
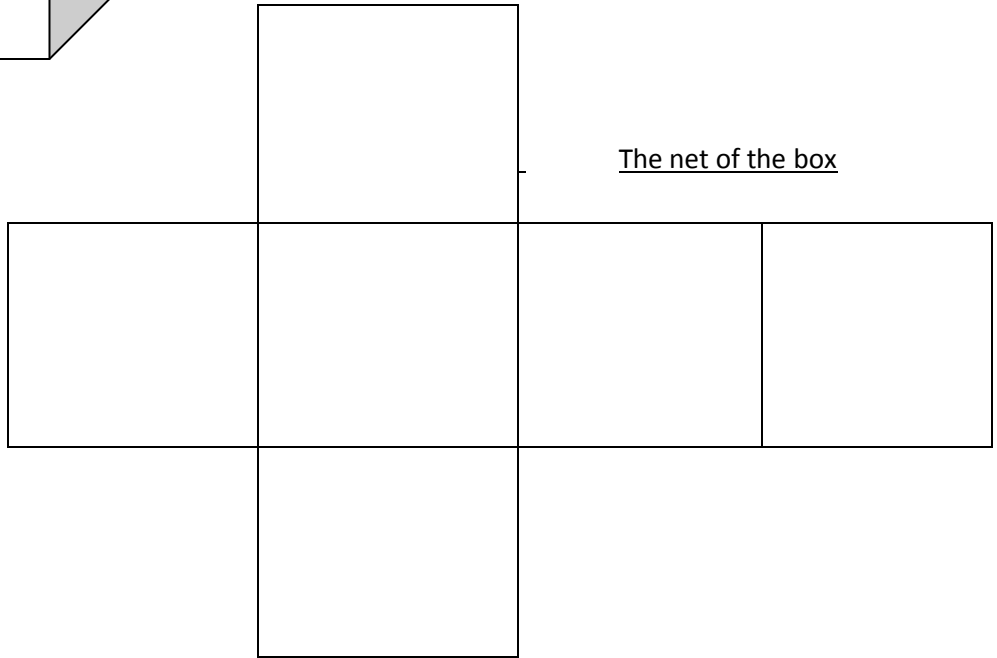


2.



The 3-d shape of the box



The net of the box

$$3. SA = 2lh + 2lw + 2hw$$

$$SUB = 2(6 \times 6) + 2(6 \times 6) + 2(6 \times 6)$$

$$= 2(36) + 2(36) + 2(36)$$

$$= 72 + 72 + 72$$

$$= 216 \text{ cm}^2$$

$$1 \text{ m}^2 = 100 \text{ cm}^2$$

$$\text{Therefore } 216 \text{ cm}^2 = 2.16 \text{ m}^2$$

The cost of the cardboard is 50 cents for each m²

$$V = l \times w \times h$$

$$l = 6 \text{ cm} \quad w = 6 \text{ cm} \quad h = 6 \text{ cm}$$

$$= 6 \times 6 \times 6$$

$$= 216 \text{ cm}^3$$

$$2.16m^2 \times 50 = \$1.08$$

Therefore the cost of each box is \$1.08

Other costs that are incurred are the glue, scissors, pencils, and your time to build the boxes.

The assumption you can make is that you can pay yourself by the hour or pay yourself by the time you put into the box. Another assumption is that you need to spend another \$5 on supplies to build the boxes.

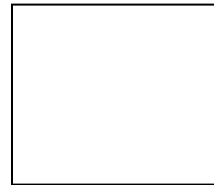
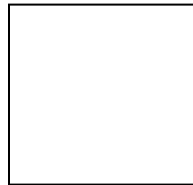
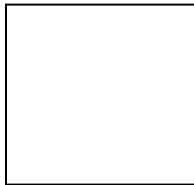
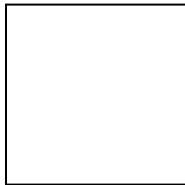
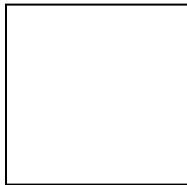
4. Top

Bottom

Right Side

Left Side

Front



Back

5. Costs

Treats = 50 cents

Box of Cardboard = \$1.08

Labour Building box = \$.25

Additional supplies = \$.25

Total cost : \$2.08

And then sell it for \$3.00 so you can make a profit of \$.92 per box.